The Desire for Unique Consumer Products:

A Moderator of the Scarcity Polarization Phenomenon?

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Abstract

Previous research has provided conflicting evidence for whether or not perceived scarcity extremitizes evaluations (e.g., Ditto & Jemmott, 1989; Harris, Lynn, & Clair, 1991). In the present study, the potential moderating role of different types of uniqueness needs was examined. Seventy-three introductory psychology students read descriptions of one consumer and one non-consumer target. Target valence (healthful vs. harmful) and prevalence (scarce vs. common) were manipulated. Participants completed measures assessing the desire for unique consumer products (DUCP, Lynn & Harris, 1997), need-for-uniqueness (NU, Snyder & Fromkin, 1977), and desirability of the targets. Although the results of a series of ANOVAs were nonsignificant ($p > .05$), all of the trends were in the predicted direction: perceived scarcity of consumer products polarized the ratings of high, but not low, DUCP participants; moreover, scarcity's effect on the non-consumer target was not moderated by DUCP. Potential causes of these null results are discussed.

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Because resources exist in limited quantities, scarcity is an ineluctable issue in life. Living beings constantly compete for adequate quantities of food, land, and in the case of people, popular new electronic items like the Xbox 360 (Xbox 360 fetches, 2005). Through regular experience with rarity, people learn to associate scarcity with evaluative extremity (Harris, Lynn, & Clair, 1991).

Recent research has demonstrated that in addition to increasing the perceived value and desirability of a product, like the Xbox 360, scarcity can also make negative evaluations more extreme (e.g., Brannon & Brock, 2001). However, some researchers have failed to find this polarization effect (Harris, Lynn, & Clair, 1991). Harris and colleagues suggest that this failure might stem from some moderating personality variable that influences scarcity's impact. They suggest that this unknown moderator could be the extent to which an individual strives to be unique. In accordance with Brock's (1968) commodity theory, which states that items are valued more when they are unattainable, scarcity will have a greater impact on product evaluations for recipients high in need-for-uniqueness. Lynn's (1991) quantitative review of the commodity theory literature described mixed evidence for this suggestion: Although some studies have demonstrated a scarcity by need-for-uniqueness interaction, other research has only displayed a scarcity main effect.

The purpose of the present study is to provide an explanation for this discrepancy in the literature. The present study suggests that the inconsistent appearance of the scarcity by need-for-

uniqueness interaction is the result of the inappropriately general measure of uniqueness needs in previous studies. The scale used in this experiment is the *desire for unique consumer products* scale (DUCP, Lynn & Harris, 1997), which was designed to measure the specific desire for unique consumer goods and experiences. The primary hypothesis of the present study is that participants higher in DUCP will exhibit greater evaluation polarization of scarce consumer products compared to participants lower in DUCP; in contrast, a general measure of need-for-uniqueness (NU, Snyder & Fromkin, 1977) is not expected to moderate scarcity's effect on consumer product evaluations. I also predict that when the target stimulus is a self-attribute, NU will moderate the effect, and DUCP will not. In sum, these hypotheses suggest that the mean desirability rating for a target item will be more extremely positive or negative, depending on initial valence, when a product is scarce as opposed to common; however, these hypotheses only apply to participants with a certain level and type of uniqueness striving.

Literature Review

Commodity Theory

According to Brock's (1968) commodity theory, commodities are valued to the extent to which they are unavailable. Commodity theory provides a more general description of traditional economic notions of supply and demand. In Brock's theory, a commodity is defined as any useful thing that can be possessed and conveyed. The definition of commodities encompasses both material goods and intangible messages and consumer experiences. The value of a commodity refers to its ability to influence behavior and attitudes. For material commodities, value also refers to desirability. In the literature, scarcity is conceptualized as unavailability.

Unavailability is typically operationalized as limits in supply or number of suppliers, cost in acquiring or providing a commodity, restrictions limiting possession of a commodity, and delays in providing a commodity.

Empirical evidence supports the hypothesis that scarce commodities are valued more than plentiful products. For instance, Worchel, Lee, and Adewole (1975) conducted an experiment in which a jar of chocolate chip cookies was presented to participants. The task of the participants was to taste a cookie and rate its quality. The manipulation in the experiment was the number of cookies in the jar; the jar contained either two (scarce) or ten (not scarce) identical cookies. As predicted by the investigators, participants rated the scarce cookies as more desirable to eat and more costly than the non-scarce cookies. Interestingly, the scarce cookies were not rated as better tasting than the abundant cookies, even though perceived scarcity increased the desirability of the product. In addition to the effect of scarcity on cookie desirability, the effect of scarcity has been extended to encompass a variety of targets such as art prints and wine (Lynn, 1989; for a review of the commodity theory literature, see Lynn, 1991).

Lynn describes at least four reasons why scarcity enhances the desirability of commodities. The first reason, which is most germane to the present study, is the fact that possessing a scarce resource provides a sense of distinctiveness (Lynn, 1992). This distinctiveness can be used to satisfy uniqueness needs or provide a standard of comparison between the self and less fortunate others (Wills, 1981, as cited in Lynn, 1992). The second explanation for scarcity's effect on value is that scarcity often implies that a resource will be costly to obtain in terms of effort or financial expense. Indeed, Lynn (1989) provides support for

the assumed expensiveness explanation. In a 2 (scarcity, scarce vs. available) x 2 (price information, provided vs. not provided) experimental design, participants read about a white wine. After reading the description, participants in all four conditions rated the wine on multiple dimensions. In support of Lynn's hypothesis, results indicated that when the price of the wine was not provided, scarcity framing enhanced both the perceived expensiveness and desirability of the wine compared to the non-scarcity framing. However, when participants were given price information, scarcity did not have an effect on desirability. Lynn and Bogert (1996) also provide evidence for the assumed expensiveness explanation of scarcity's enhancement of desirability. In their experiment, participants read about stamps and coins which were described as scarce (few stamps issues or coins minted) or common (many stamps issued or coins minted). Participants rated the future value of and demand for the target item. Consistent with the investigators' hypothesis, participants predicted that the scarce target item would exhibit a greater increase in market price compared to the plentiful item. However, in this study, participants did not predict greater future demand for the item based on current scarcity. The authors suggest that the student sample had little interest in the target categories (i.e., stamps and coins), and that the scarcity manipulation would affect demand for these targets for participants interested in collecting these items. This suggestion is consistent with commodity theory's requirement that the commodity must have some inherent value (Brock, 1968).

A third explanation for the effect of scarcity on desirability pertains to the concept of psychological reactance (e.g., Brehm, 1966). According to Brehm's psychological reactance theory, people desire to preserve established freedoms. In fact, evidence suggests that people are

more motivated by potential loss than potential gains of the same magnitude (Tversky & Kahneman, 1981). As Lynn (1992) suggests, unavailability threatens the freedom to possess the resource. Worchel, Lee, and Adewole's (1975) study using chocolate chip cookies provided evidence for this suggestion. In addition to the two conditions described above (scarcity vs. abundance), a third condition was included in which participants experienced increasing scarcity when the jar of ten cookies was replaced by a jar of two cookies. Participants in the increasing scarcity condition provided the most extremely positive evaluations of the cookies compared to the constant scarcity and no-scarcity conditions.

The fourth explanation for scarcity's effect on desirability is the possibility that unavailability serves as a heuristic cue (Cialdini, 1985). People generally associate rarity with evaluative extremity, particularly in the social domain (Festinger, 1954, as cited in Ditto & Jemmott, 1989). Scarcity can also serve as cues to other types of information. For example, restricted books are also assumed to have greater sexual content (Pincus & Waters, 1976). The desirability of a target will increase to the extent that the inferred attributes (e.g., amount of sexually explicit material) are valued by the judgment maker (Lynn, 1992).

In addition to multiple explanations for scarcity's enhancement of value, researchers also debate the mechanism by which the enhancement of desirability occurs. As described above, many researchers espouse the idea of a heuristic explanation. On the other hand, Brannon and Brock (2001) posit an elaborative process termed attention-based rumination. In one experiment supporting this theory, half of the participants were placed under cognitive load while making an evaluation of a rare or common characteristic (Brannon & Brock, 2001). When thinking

resources were not impaired, scarcity was correlated with attitude extremity away from a point of neutrality. However, under load conditions, in which participants could not use all of their usual cognitive resources to elaborate on an issue, the scarcity manipulation did not correlate with attitude extremity. These results suggest that elaboration is a key mediator of scarcity's extremitization of evaluations.

Scarcity Polarization Effect

In most of the studies discussed above, perceived scarcity enhanced target desirability. However, in the work of some researchers, scarcity has been demonstrated to polarize evaluations such that rare evaluative targets are rated as more extremely negative when they are negatively valenced, or more extremely positive when they are positively valenced (e.g., Ditto & Jemmott, 1989; Brannon & Brock, 2001). In Ditto and Jemmott's experiment, participants rated a medical condition that was described as rare or common, and healthful or harmful. Supporting the experimenters' hypothesis, the condition was rated more extremely in the low prevalence conditions compared to the high prevalence conditions. However, evidence for this polarization effect has been mixed. For instance, Harris et al. (1991) were unable to replicate the findings of Ditto and Jemmott (1989). Harris and his colleagues suggest that the scarcity polarization effect could be moderated by an individual differences variable that was not present in, or was unevenly distributed across, their samples. However, attempts to explain their results through personality factors such as need-for-cognition (NCOG) and competitiveness were unsuccessful.

Uniqueness Needs

One personality factor that has received significant attention in the commodity theory

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literature is the extent to which an individual strives to be unique. According to Brewer's (1991) optimal distinctiveness theory, individuals are constantly trying to reconcile the competing motivations to fit in with and stand out from others. Uniqueness strivings are the result of individuals' need to make themselves moderately different from others (Fromkin, 1972). Commodity theory predicts that the efficacy of scarce commodities will be greater for recipients high in need-for-uniqueness (Brock, 1968). In fact, Lynn's (1991) review of the commodity theory literature generally supports the hypothesis that scarcity's enhancement of value is stronger for people high in need-for-uniqueness. However, the interaction of scarcity and uniqueness needs has been inconsistently observed (Lynn, 1991). I hypothesize that this inconsistency stems from the fact that the scales administered in previous research were too broad; these scales failed to measure specific facets of the need-for-uniqueness motive. Because people seek uniqueness in different ways, multiple scales of uniqueness strivings are needed (Lynn & Harris, 1997). For example, some people, though not all, satisfy their uniqueness needs through the possession of unique consumer products (Brock, 1968). Since Lynn's (1991) review, several new scales have been developed to measure more specific aspects of uniqueness needs.

Desire for Unique Consumer Products

The Desire for Unique Consumer Products Scale (DUCP, Lynn & Harris, 1997) is an individual differences measure designed to quantify the desire for unique consumer goods, services, and experiences. The scale comprises eight items designed to tap into this desire. For example, the scale contains items such as "I am more likely to buy a product if it is scarce." (See Appendix A for full DUCP scale). According to Lynn and Harris (1997), this scale was

developed to address several critical flaws in the Snyder and Fromkin (1977) need-for-uniqueness scale (NU, see Appendix B for full NU scale). The first criticism of the older scale centers on its multidimensionality (Lynn & Harris, 1997). Lynn and Harris suggest that because the NU scale loads on three different factors, the overall score on the scale is difficult to interpret. Further, they note that the scale overemphasizes public and socially risky displays in the quest for uniqueness. For example, people who want to satisfy their uniqueness needs without alienating others may acquire rare, inconspicuous possessions. The final criticism of the scale is most relevant to the present investigation: The NU scale does not include any items pertaining to consumer products.

The DUCP performed adequately on assessments of internal and test-retest reliability (Lynn & Harris, 1997). Scores on the scale are also appropriately correlated with theoretically related constructs (Lynn & Harris 1997). The DUCP scale appears to be a reliable, convenient measure for testing the desire for unique consumer products.

Hypotheses

Three major hypotheses were tested in the present experiment.

Hypothesis 1: Scarcity Polarization Effect (Scarcity x Valence Interaction)

Under scarcity conditions, targets will be rated more extremely desirable or undesirable (depending on initial framing) compared to high prevalence conditions. This hypothesis is consistent with literature demonstrating the scarcity polarization effect (e.g., Ditto & Jemmott, 1989). However, the purpose of this study is to explain the null results of studies which did not find the scarcity polarization effect (e.g., Harris, Lynn & Clair, 1991), so it is also possible that

the scarcity polarization effect will not emerge until DUCP and target type are taken into consideration (see Hypothesis 2).

Hypothesis 2: Scarcity x Valence x DUCP Interaction for desirability ratings of the Consumer Target

Participants higher in DUCP will exhibit greater evaluation polarization (see Hypothesis 1) compared to lower DUCP participants for the consumer target; on the other hand, a three-way interaction between scarcity, valence, and DUCP is not predicted for the self-attribute target.

Hypothesis 3: Scarcity x Valence x NU Interaction for desirability ratings of the self-attribute

Participants higher in NU will exhibit greater evaluation polarization compared to lower NU participants for the self-attribute target; on the other hand, a three-way interaction between scarcity, valence, and NU is not predicted for the consumer target.

Method

The design of this study was 2 (prevalence, scarce vs. common) x 2 (valence, healthy vs. harmful) x 2 (uniqueness needs, higher vs. lower) x 2 (target, consumer and self-attribute) mixed three between-subjects, one within-subjects.

Participants

Four hundred and eighteen introductory psychology students completed the DUCP, NU, and decision-making styles inventory (DMS, Nygren, 2000; see Appendix C) at a pre-screening session. Of these participants from pre-screening, seventy-three returned to complete the experiment for partial course credit.

Materials

The first page of the experimental packet provided instructions for the experiment. The directions instructed participants to complete materials in the order in which they appeared and not to return to previously completed sections. The second page contained a description of the first target, either a consumer product (a food preservative), or a self-attribute ('situation mindedness'). The third page contained manipulation checks (ratings of healthfulness and scarcity) and the dependant measure (desirability) for the target. As a check on the valence manipulation, participants rated the healthfulness/harmfulness of the target on a 7 point Likert-type scale anchored by "completely harmful," "moderately harmful," "slightly harmful," "neither healthful nor harmful," "slightly healthful," "moderately healthful," and "completely healthful." As a check on the prevalence manipulation, participants rated the prevalence of the target on a 7 point Likert-type scale anchored by "completely uncommon," "moderately uncommon," "slightly uncommon," "neither common nor uncommon," "slightly common," "moderately common," and "completely common." Participants rated the desirability of the target on a 7 point Likert-type scale anchored by "completely undesirable," "moderately undesirable," "slightly undesirable," "neither desirable nor undesirable," "slightly desirable," "moderately desirable," and "completely desirable." Participants also completed a free-response thought-listing task in which they provided up to 10 reasons for their ratings. The fourth page contained a description of the target type that had not been presented yet (e.g., if page 2 contained a consumer product, then page 4 contained a non-consumer product). The order of target type (consumer vs. non-consumer) was counterbalanced across conditions such that half of the participants read

descriptions of a consumer target first, and the other half read the non-consumer target description first; however, an order effect of target type was not predicted. For the consumer product, all participants read identical descriptions except for the two manipulations: The target was described as either scarce (present in 2% of all canned foods) or common (present in 80% of all canned foods) and either healthful (lowers cholesterol) or harmful (raises cholesterol). In order to eliminate the assumed expensiveness alternative explanation (Lynn, 1989), the price for the preservative was provided and held constant across conditions. For the non-consumer product, all participants read identical descriptions except for the two manipulations: The attribute was described as either scarce (present in 5% of people) or common (present in 83% of people), and either healthful (associated with good mental health) or harmful (associated with depression). Valence and scarcity were held constant for each participant (i.e., both targets will be described as salubrious or deleterious for a single participant) such that half of the participants read descriptions of two healthful targets and the other participants read descriptions of two harmful products. The fifth page of the experimental packet contained dependent measures identical to those in the third page. The sixth page of the packet contained a survey of demographic variables. The seventh page of the packet contained a thorough debriefing. This page emphasized the fictitious nature of the target stimuli.

Procedure

Participants came to the laboratory in groups of between one and five students for an experiment which was ostensibly an investigation of opinions about physical and mental health news stories. After welcoming participants to the experiment, the experimenter verbally

informed participants of the right to end the experiment at any time without loss of credit. Participants were then instructed to begin work on the experimental packet. Once all participants were finished, the experimenter collected the packets and the participants were thanked and dismissed. The entire session lasted approximately twenty minutes.

Results

The data were analyzed using a series of 2 (prevalence, high vs. low) x 2 (valence, healthy vs. harmful) x 2 (uniqueness needs, higher vs. lower) analyses of variance. The dependent variable is desirability of the target. All results are significant at the $p < .05$ level unless otherwise indicated.

Uniqueness Scores

DUCP. Responses to all eight items on the DUCP scale were added together and divided by eight to get an average response for each participant. The mean average response on the scale of participants who completed the experiment was 3.08 (approximately the midpoint on a 5 point scale). In order to split participants into groups of higher and lower DUCP, scores were split at the mean and 13 scores within 1/4 of a standard deviation about the mean were removed from analysis.

Need for Uniqueness. Factor analysis revealed two factors of the NU scale. The two subscales are moderately correlated ($r = -.38$). Subscale 1 ($\alpha = .81$, NU Opinions) contains 16 items regarding nonconformity of opinions, and subscale 2 ($\alpha = .66$) contains 8 items regarding nonconformity in actions. Because the overall NU scale demonstrates low item reliability ($\alpha = .45$) and contains negatively correlated factors, it will not be used in further analysis. However,

the opinions subscale (NU Opinions) of the NU scale will be used. NU Opinions and DUCP are moderately correlated (r = .37). As with DUCP, NU Opinions was divided into higher and lower groups by dividing at the mean and removing 13 scores within 1/4 of a standard deviation about the mean.

Manipulation Checks

Valence. Demonstrating the effectiveness of the valence manipulation, participants who read a description of a healthy consumer target rated the target as significantly more healthy (M = 5.66) than participants who read a description of a harmful consumer target (M = 2.87), $t(66) = 11.09$, $p < .001$. Likewise, participants who read descriptions of a healthful self-attribute rated the target as significantly more healthful (M = 4.97) compared to participants who read a description of an unhealthy self-attribute target (M = 3.08), $t(58) = 5.84$, $p < .001$. However, due to large variation in healthfulness ratings in both the healthy and harmful conditions, it seemed that the manipulation was not consistently effective across participants. To account for this variability in manipulation effectiveness, participants were divided into groups *healthy* and *harmful* for the purposes of further analysis based on their responses to the manipulation check question. The data of participants who rated the target as “neither healthful nor harmful” was discarded, and participants who rated the target between “slightly healthful” and “completely healthful” were grouped in the *healthy* group, and participants who rated the target between “slightly harmful” and “completely harmful” were placed in the *harmful* category. This split was conducted separately for each target, so it is possible that a participant would be in the *healthy*

category for one target and the *harmful* category for the other target, even though manipulated valence was held constant for each participant.

Scarcity. Demonstrating the effectiveness of the scarcity manipulation, participants who read a description of a scarce consumer target rated it as significantly more scarce ($M = 5.97$) than participants who read a description of a common consumer target ($M = 3.75$), $t(48) = 5.64$, $p < .001$. Likewise, participants who read a description of a scarce self-attribute target rated it as significantly more scarce ($M = 5.92$) than participants who read a description of a common self-attribute target ($M = 3.19$), $t(51) = 9.02$, $p < .001$. However, as with the valence manipulation check question, there was large variation in participants' responses. Therefore, a similar split was done whereby the data of participants who responded neutrally to the scarcity manipulation check question (i.e., response = 4) were removed, and the remaining participants were split into groups *scarce* and *common* based on their responses.

Scarcity Polarization Effect

Consumer Target. There was an insignificant trend toward a scarcity x valence interaction for ratings of the consumer target $F(1,46) = 3.10$, $p = .09$: Participants rated the healthy target as more extremely desirable when it was scarce ($M = 6.0$) as opposed to common ($M = 5.0$), and they rated the unhealthy target as more extremely undesirable when it was scarce ($M = 3.09$) as opposed to common ($M = 3.35$).

Self-Attribute. A significant scarcity x valence interaction emerged for ratings of the self-attribute $F(1, 44) = 5.66$, $p = .02$: Participants rated the healthy target as more extremely

desirable when it was scarce as opposed to common, and they rated the unhealthy target as more extremely undesirable when it was scarce as opposed to common.

Scarcity x Valence x DUCP Interaction

Consumer Target. The three-way interaction between scarcity, valence, and DUCP was not significant $F(1, 46) = .26$, $p > .1$. However, the results were in the predicted direction: For lower DUCP participants, scarcity did not influence desirability ratings; for higher DUCP participants, however, desirability scores were higher for the scarce healthy target ($M = 5.67$) than the scarce common target ($M = 4.69$) and desirability scores were lower for the scarce harmful target ($M = 2.6$) than the common harmful target ($M = 3.5$).

Self-Attribute. As predicted, no significant interaction emerged between scarcity, valence, and DUCP.

Scarcity x Valence x NU Opinions Interaction

Consumer Target As predicted, no significant interaction emerged between scarcity, valence, and NU Opinions.

Self-Attribute. The three-way interaction between scarcity, valence, and NU Opinions was nonsignificant $F(1, 37) = .17$, $p > .1$. However, the results were in the predicted direction as greater polarization occurred for higher NU Opinions participants than for lower NU Opinions participants, particularly for the harmful target.

Discussion

The results of the present study failed to demonstrate the moderating role of uniqueness needs in the scarcity polarization effect. My first hypothesis regarding the scarcity polarization

effect was supported for the self-attribute target, and there was a nonsignificant trend for polarization of the consumer target. In contrast, all of the additional planned analyses produced null results and failed to support my second and third hypotheses regarding the moderating role of uniqueness needs on the scarcity polarization phenomenon. However, although the support for my hypotheses was statistically nonsignificant, it is important to note that all of the interactions occurred in the predicted directions. It is possible that my null results are the product of several potential methodological concerns, instead of an accurate description of the effect. Also, there are several additional factors which prevent a clear interpretation of my results.

The first group of limitations concerns my sample size. The small sample size used in the study resulted in extremely low power, so my tests were not sensitive in detecting significant differences. Also, I could not examine the impact of which target was presented first. Although no influence of target order was predicted, the order was counterbalanced across participants. Further, it was impossible to examine the effect of potentially important variables such as age, gender, and ethnicity. It is likely that participants raised in a different culture would respond to scarcity claims in a different fashion, and that their optimal uniqueness needs might vary from those of American college students (Kim & Markus, 1999). I had hoped to obtain a sample size of approximately 200 participants, but my sample size was less than half of that. Consequently, my cell sizes, particularly in the three-way interaction analyses, were extremely small (e.g., < 5); therefore, my results are inconclusive.

Besides problems interpreting the results of an ANOVA with such a small sample size, a broader problem exists with my analysis: It is possible that ANOVA is an inappropriate

technique for other reasons. The use of ANOVA assumes that the response variable, desirability, is a numerical variable. However, the desirability ratings used in my experiment might be more accurately described as ordinal, categorical data. There is no reason to assume that the psychological difference between, for instance, “neither common nor uncommon” and “slightly common” is the same as the difference between “moderately common” and “completely common.” If the psychological difference between points are greater at the ends of the Likert-type scale used in the study, then the data might provide statistical support for my hypotheses; on the other hand, if the psychological distance between points decrease at the extremes of the scale, then the data would provide evidence in favor of the null hypotheses. A more advanced form of analysis might be more appropriate for use with this data set.

Another set of problems in interpreting my results concerns the internal validity of the experiment. Because I split participants into high and low scarcity and harmfulness groups based on subjective ratings instead of using my experimental manipulations, statements of causality are inappropriate. Future research will be needed in which the manipulations are refined such that participants have a clear understanding of the objective prevalence and harmfulness of the targets. Perhaps this could be better accomplished through use of a paradigm in which participants have direct experience with the target.

Besides the internal validity of this experiment, the external validity is also questionable. The present study only used one example of a consumer and self-attribute target, and neither of these targets was prototypical in any way, so it would be difficult to generalize the findings of this experiment to those involving other targets. In fact, specific issues arose with each of the

targets used in this experiment. In light of the recent series of food contamination scares (e.g., spinach, dog food, and beef), it is possible that participants were thinking more than normal about the potential harm of the food preservative. In general, undergraduates, especially those living in a dormitory who do not shop for their own food, might not be concerned about food preservatives, so this target would have been a new attitude item for them. However, the participants in my experiment might have come into the experiment with a priori beliefs about the food item. Alternatively, the prospect of a potential elevation of cholesterol might seem inconsequential in comparison to the consequences of other food contamination (i.e., death). If participants in the harmful condition did not really believe the item was particularly harmful, then this might explain the lack of extremitization in the negative direction before DUCP is accounted for. Issues also surround the use of "situation mindedness" as the self-attribute target. Although this target is fictitious, several participants indicated in their free response answers that this is a common attribute among themselves and their friends. Participants also suggested that regardless of risk of depression, no one can fix a problem better than the individual. Because beliefs such as this one are strongly associated with our individualistic culture, it might be difficult to convince participants that this attribute is harmful. However, the scarcity polarization effect was significant for ratings of the self-attribute, whereas the interaction between valence and scarcity was insignificant for the consumer target. If the attention-based rumination model is correct, and elaboration is the mechanism behind the scarcity polarization phenomenon, then perhaps this polarization occurs because all participants, regardless of uniqueness needs, are motivated to elaborate by some aspect of this target. For example, this key aspect might be the

fact that the target relates to the self and is closely tied with one of our cultural values, so it is more personally relevant to participants. Another issue might be its association with depression. According to John Greden, executive director of the University of Michigan Depression Center, "Depression is a huge problem in the college student population. . . the estimates are that probably 15 percent of the college student population may be struggling with depressive illnesses" (Heading back, 2003). Thus, college students might be familiar with the effects of depression and motivated to pay close attention to ways to avoid the condition. A mediational analysis of the free-response data might clarify this issue. Mediational analysis would also be useful in providing support for elaboration as the general mechanism for polarization.

Another direction for future analysis is examining the role of decision-making style in evaluations of scarce and common targets. Decision-making style might moderate the scarcity polarization effect in that, for example, analytical decision-makers might elaborate more about the information presented than would intuitive decision-makers, and regret-based decision-makers might evaluate harmful targets more extremely. Further research and analysis will be needed to address these possibilities.

In future research, once the concerns of the present study are addressed, I would like to explore additional manipulations in order to investigate the mechanisms behind the scarcity polarization phenomenon and determine the causal relationships among the factors. For example, I hope to directly manipulate uniqueness needs using a paradigm in which participants complete a priming task emphasizing pronouns such as 'we' or 'them' to manipulate the level of felt distinctiveness (Brewer & Gardner, 1996). Brewer and Gardner (1996) demonstrated that

priming the interpersonal or collective ‘we’ alters later judgments of similarity. Hopefully, by implementing this procedure, I will be able to demonstrate a causal relationship between increased need-for-uniqueness and greater evaluation polarization. In order to explore the proposed mechanism of attention based elaboration, I hope to directly manipulate elaboration.

This line of research has important theoretical and practical implications. This research will contribute to the literature on the scarcity polarization effect by qualifying the phenomenon and exploring its underlying mechanism. The practical implications of this knowledge are varied. For instance, scarcity claims are abundant in advertising for consumer goods; therefore, the present research has obvious relevance in marketing: A better understanding of the details of the scarcity polarization phenomenon will lead to more effective scarcity-based advertisements. Because commodities are not restricted to consumer goods, but instead include persuasive messages, this research could also have important implications for persuasive communication in general. Although the present study did not examine the impact of scarcity on the persuasiveness of a message, Rosen (1966) suggests that the distinction between material and informational commodities is not always necessary. If a message is persuasive to the extent that it is not widely circulated, then it might be prudent for people with messages to rethink the traditional method of disseminating information through mass media outlets (i.e., television), or find ways to make the audience perceive the message as scarce.

Scarcity claims are used frequently in various persuasive contexts. Because these claims have the power to affect evaluations, at least for some people in certain contexts, it is important

to understand more about the impact of perceived scarcity. The present research points to the need for future examination of this potentially powerful phenomenon.

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Appendix A: DUCP

1. I am very attracted to rare objects.

2. I tend to be a fashion leader rather than a fashion follower.

3. I am more likely to buy a product if it is scarce.

4. I would prefer to have things custom-made than to have them ready-made.

5. I enjoy having things that others do not.

6. I rarely pass up the opportunity to order custom features on the products I buy.

7. I like to try new products and services before others do.

8. I enjoy shopping at stores that carry merchandise which is different and unusual.

The Desire for Unique Consumer Products: A Moderator

Appendix B: NU

1. When I am in a group of strangers, I am not reluctant to express my opinion openly.

2. I find criticism affects my self-esteem.

3. I sometimes hesitate to use my own ideas for fear they might be impractical.

4. I think society should let reason lead it to new customs and throw aside old habits or mere traditions.

5. People frequently succeed in changing my mind.

6. I find it sometimes amusing to upset the dignity of teachers, judges, and “cultured” people.

7. I like wearing a uniform because it makes me proud to be a member of the organization it represents.

8. People have sometimes called me “stuck-up.”

9. Others’ disagreements make me uncomfortable.

10. I do not always live by the standards and rules of society.

11. I am unable to express my feelings if they results in undesirable consequences.

12. Being a success in one’s career means making a contribution no one else has made.

13. It bothers me if people think I’m being too conventional.

14. I always try to follow the rules. (Reverse scored)

15. If I disagree with a superior on his or her views, I usually do not keep it to myself. (Reverse scored)

16. I speak up in meetings in order to oppose those whom I feel are wrong. (Reverse scored)

17. Feeling “different” in a crowd of people makes me feel uncomfortable.

18. If I must die let it be an unusual death rather than an ordinary death in bed.

19. I would rather be just like everyone else rather than be called a freak.

20. I must admit I find it hard to work under strict rules and regulations.

21. I would rather be known for always trying new ideas rather than employing well-trusted methods.

22. It is better to always agree with the opinions of others than to be considered a disagreeable person.

23. I do not like to say unusual things to people.

24. I tend to express my opinions publicly, regardless of what other say. (Reverse scored)

25. As a rule, I strongly defend my own opinions. (Reverse scored)

26. I do not like to go my own way.

27. When I am with a group of people, I agree with their ideas so that no arguments arise.

28. I tend to keep quiet in the presence of persons of higher rank, experience, etc.

29. I have been quiet independent and free from family rule.

30. Whenever I take part in group activities, I am somewhat of a nonconformist.

31. In most things in life, I believe in playing it safe rather than taking a gamble.

32. It is better to break rules than always conform to an impersonal society.

The Desire for Unique Consumer Products: A Moderator

Appendix C: DMS

1. I feel that if I play my decisions carefully I will make good decisions.

2. In spontaneous decision situation sI usually find that I have good intuitions.

3. I think that I could keep myself from worrying later if I had made a bad decision. (Reverse scored)

4. In making decisions I first try to make a mental list of all the factors or attributes that will be important to my decision.

5. I can get a good “feeling” for most decision situations very quickly.

6. I sometimes spend too much time hesitating before making decisions.

7. Before I make a decision, I like to figure out the most efficient way of studying it.

8. I feel that I have a knack for making good, quick decisions.

9. Before I make a decision, I think about whether others will approve or disapprove of it.

10. I’m very rational when it comes to evaluation risky options.

11. I think that relying on one’s “gut feelings” is a sound decision-making principle.

12. I tend to be someone who worries a lot over decisions I’ve made.

13. In making decisions I first make a careful initial estimate of the situation.

14. There are many common sense “rules-of-thumb” that I know of that usually lead to good decisions.

15. After making a decision, I find that I often go back and re-evaluate the situation.

16. I try to pay attention to past information in making new decisions.

17. Sometimes decisions, even important ones, are not difficult to make because they just “feel” right.

18. I have trouble putting the results of disappointing decisions I’ve made behind me.

19. A good rule of thumb is that the more information I have in making a decision, the better that decision will be.

20. Simple decision rules usually work best for me.

21. I rarely rethink old decisions I’ve made. (Reverse scored)

22. In making decisions I try to evaluate the importance of each piece of information in the decision process.

23. When forced to make a quick decision, I find that information that readily comes to mind is usually the most useful in making a choice.

24. Worrying about future decisions that I have to make is something I often do.

25. I always try to be fully prepared before I begin working on making a decision.

26. My first reaction to a decision situation usually turns out to be the best one.

27. Many times when I look back on a choice I’ve made, I wish that I would have put more effort into evaluating the alternatives.

28. In making decisions I try to examine the importance of the good and bad points of each alternative.

29. If I can’t decide what to do, I go with my “best guess”.

30. When I find out that I’ve made a bad decision I feel a lot of regret.

31. I like to take a rational, systematic approach to making decisions.

32. When making decisions, my first instinct usually turns out to be the best.

33. If I were gambling at a casino I would prefer to play simpler games like slot machines where you don't have to concentrate on playing complex strategies.

34. My best decisions are those for which I've carefully weighed all of the relevant information.

35. I let my intuition play a big part in most decisions I make.

36. I generally don't make very good decisions under time pressure.

37. I generally rely on careful reasoning to make up my mind.

38. I often rely on my first impression when making a decision.

39. I sometimes get "butterflies" in my stomach when I have to make decisions.

40. I like to make decisions in an orderly manner.

41. I rely on my intuition in making many of my personal decisions.

42. After making a decision I sometimes worry about the regret I'll feel if the outcome turns out to be a bad one.

43. Most important decision sin life are complex and need to be evaluated in a systematic way.

44. I find that my best decisions usually result from using the "quick and easy" approach rather than the "slow but sure" method.